



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,534	11/15/2001	Toshihiro Shima	TMI-108	7269

7590 08/24/2005

MATTINGLY, STANGER & MALUR, P.C.
ATTORNEYS AT LAW
SUITE 370
1800 DIAGONAL ROAD
ALEXANDRIA, VA 22314

EXAMINER

KANG, ROBERT N

ART UNIT	PAPER NUMBER
----------	--------------

2622

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,534

Applicant(s)

SHIMA, TOSHIHIRO

Examiner

Robert N. Kang

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 11-19, 21-32 and 34-36 is/are rejected.
- 7) ☒ Claim(s) 6-10, 20 and 33 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to because figures 1 and 8, figures 2 and 9, as well as figures 5 and 11 are identical and thus redundant. If different figures are referenced in different embodiments of the claimed invention, the figure itself must show the claimed disparity. If the two figures show a structurally and functionally identical invention, examiner must assert that the two embodiments are equivalent. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 4 is objected to because of the following informalities: on line 3 the word "turned" is misspelled as "tuned." Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 4, and 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The recited specification on page 4, paragraph 1, discloses a printer "that is capable of independently acquiring information resources to be printed from the network, generating print data, and executing printing not via the host computer." Examiner sees a critical flaw in this claim. In the OSI communications model, the Application layer is at the "top" layer of the stack. Device drivers typically convert and pass down data from the application (user level) layer through the session layer to be directed to the transport layer for encoding into usable communications frames/packets to be sent out on the physical transmission media. An "independent" printer with device drivers encoded within the network interface card of the printer is, unless further clarified within the specification, useless due to the simple fact that without device drivers, the individual applications have no method of sending data across the network. In the

industry, a virtual printer driver is generally installed on each host machine, which converts application data into a packetized data format which can then be received and interpreted by the print server and transmitted to various device drivers attached to said server. The specification makes no mention of any software to be installed on the host machines and is thus non-enabling. Additionally, even virtual printer drivers must be updated as the server software is updated, thereby nullifying a significant portion of the claimed benefits of the pending invention. If a virtual printer is not installed on each host pc, then each program on each host pc's source code must be modified and recompiled to send print data through a predetermined network socket to the claimed network device using a predetermined packet or data format which can be interpreted by the said network device. This is clearly a giant step backwards in terms of reliability, ease of use, time and cost of installation, and system centralization.

Regarding claims 4 and 22, the claim states "the prescribed time is ... when said printer is turned on." Examiner asserts that the stated network device has no way of knowing when the printer has been turned on without some form of polling or an interrupt sent from the printer device across network. The specification lacks any detailed description of a polling or handshaking process between the network device and the printer.

In light of this enablement issue with the pending application, examination of the dependent claims 2-20 and 22-33 is precluded.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1, 2, 3, 4, and 5 are rejected under 35 U.S.C. 102(a) as being anticipated by Perlman (US-PAT 6269481).

With regards to claim 1, Perlman discloses in figure 1 a WebTV client 1 which is connected to the Internet 3 via modem pool 2 connected through network bus 29. The WebTV client qualifies as a "network device" because it is a computing peripheral or computer communicably attached to a local or wide area network. Perlman discloses in column 6 lines 20-23, in figure 6, "in response to system initialization, the WebTV box 10 requests the device codes from all peripheral devices 30 connected in the daisy chain in step 601." Perlman also states "in step 604, the WebTV box 10 transmits all of the received device codes to the WebTV server 5 over the network connection 29." Perlman further explains "in step 606, the WebTV server 5 automatically downloads these device drivers to the WebTV client 1 over the network connection 29. In step 607, the WebTV box 10 receives and automatically installs the device drivers from the WebTV server 5." With regards to the peripherals 30, Perlman states in column 1, lines 26-33, "typical peripheral devices that may be used in such a system include keyboards, pointing devices, monitors, printers, mass storage devices, and audio or visual input/output devices. Generally, for any particular peripheral device, the main computer must be programmed with special software that permits the main computer

to communicate with the peripheral device--this software is often referred to as the device driver for the peripheral device." Therefore, the first limitation of claim 1 is met, since the network device, the WebTV host 10, acquires "print related information necessary for generating print data" as stated in the application disclosure "from a prescribed location on the network at a prescribed time."

Perlman shows in figure 5 the WebTV box 10 communicably attached via data bus 28 to peripherals 30. In the specific case of utilizing a printer as a peripheral 30, print data converted from text or images to a printer-recognizable format via the printer driver downloaded and installed in WebTV host 10 is transmitted to the printer via bus 28. Therefore, the patented invention meets the limitation "said print data is generated by using said acquired print related information, and sent to said printer."

Regarding claims 2 and 3, Perlman states in column 6, lines 59-62, "once the appropriate drivers are identified, in step 606 the WebTV server 5 automatically downloads these device drivers to the WebTV client 1 over the network connection 29." Therefore, the "said information resources are appropriately acquired from a prescribed location on the network." Because Perlman does not specifically detail the printer operation, examiner asserts that the utilization of a printer as a peripheral inherently requires print data sent from the device driver in the following industry-accepted formats: image data, text data, or intermediate data. Therefore claim 3 is anticipated by Perlman's system as well as every printer communicably attached to a host PC, server, or network device.

In regards to claim 4, Perlman discloses in column 5, lines 34-35, a method of automatically identifying and installing device drivers for peripherals "at system initialization (i.e., upon power-up or in response to a reset command.)" Thus the prescribed time as disclosed in the rejection for claim 2 is either when the said printer is turned on [or] upon receipt of instructions from a user." Broadly defined, the system power-up process includes all peripheral devices, and thus the method disclosed by Perlman automatically begins upon initialization of the printer. Additionally, broadly defined, a reset command as disclosed by Perlman qualifies as an instruction from the user, thus the patented system begins its automatic identification and driver download process "upon receipt of instructions from a user."

Regarding claim 5, Perlman discloses in column 7, lines 7-8, "a method and apparatus for automatically installing appropriate device drivers for all peripheral devices connected to a host processing system over a network." Again stating column 6, lines 59-62 of Perlman's patent, the system "in step 606 the WebTV server 5 automatically downloads these device drivers to the WebTV client 1 over the network connection 29." Therefore the print related information comprises "at least a color version table, printer driver program, font data, or font renderer program"

7. Claims 34, 35, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Gase (US-PAT 5580177).

Regarding claim 34, Gase discloses a method of information processing wherein a file server 16 contains "memory for storing a most updated printer driver procedure

for each printer type coupled to the file server.” Flowchart 3a diagrams the process flow in which Gase’s method acquires “print related information.” Upon user input to print a document, the print utility in networked clients 10-14 requests a print job in step 70. Upon selection of a printer in step 74, the file server compares printer driver in the client machine with the file server stored printer driver. Gase further describes this judgement in column 5, lines 13-22, stating, “because memory 34 stores (i) most updated versions of printer drivers in printer/driver library 38 (ii) printer administration utility 28 and (iii) printer utility 24, there always exists a repository where the most updated version of a program can be found. Thus, when a client processor elects to utilize a particular printer, it further determines whether its printer driver 26 is consistent with the most updated printer driver version in printer driver library 38. If not, the client processor causes its printer driver 26 to be revised or overwritten to reflect the most updated printer/driver version contained within printer driver library 38.” After the appropriate driver is determined and/or installed, the host pc uses the driver to generate print data to send to the printer. Therefore, Gase’s method includes “a step for judging whether print related information should be acquired at a prescribed time,” a step “for appropriately acquiring said print related information from a prescribed location on the network upon judging it should be acquired,” and a step for “generating said print data by using said print related information to be acquired, and sending said print data to said printer.”

In regards to claim 35, because the method claimed in 34 is expressly anticipated by Gase's patent, it is understood that the computer program for executing

the information processing method of claim 34 would be anticipated by Gase's information processing method as well.

With regards to claim 36, Gase discloses a file server 16 which contains a memory 34 wherein a plurality of data structures that are necessary for the operation of the client processor/printer network are stored. Gase states in column 3, lines 58-62, "one such data structure is a printer/driver table 36 which contains a listing that associates each printer connected to file server 16 with a printer driver procedure for the printer. Data from the printer/driver table 36 is used to access a printer driver procedure stored in printer/driver library 38." Therefore the server is able to associate, by location, each printer 18-22 connected through modular I/O cards 30 with its respective printer driver. This expressly comprises "a database for storing location information on the network concerning print related information which is used to generate the print data."

Additionally, Gase states in column 4, lines 38-44, "each modular I/O card 30 periodically 'advertises its availability by the transmission of messages to file server 16. Each message includes the name of the service, the type of the service, and the address of the available service. This data is accumulated within file server 16 and enables the generation of display presentation 60 at a client processor. Display screen presentation 50 appears on a client processor in response to a user's request to show available printers." The host queries the server in reference to available printers according to the installed device driver on the printer, and the server collects this address and status information from the multiple printer transmissions stored in a database and relays the information back to the host. Broadly defined, this qualifies as

“an inquiry of location information of print related information, the corresponding location information is extracted in reference to said database and sent.”

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 21, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman (US-PAT 6269481) in view of Kageyama (US-PAT 5303336).

With regards to claim 21, With regards to claim 1, Perlman discloses in figure 1 a WebTV client 1 which is connected to the Internet 3 via modem pool 2 connected through network bus 29. The WebTV client qualifies as a “network device” because it is a computing peripheral or computer communicably attached to a local or wide area network. Perlman discloses in column 6 lines 20-23, in figure 6, “in response to system initialization, the WebTV box 10 requests the device codes from all peripheral devices 30 connected in the daisy chain in step 601.” Perlman also states “in step 604, the WebTV box 10 transmits all of the received device codes to the WebTV server6 over the network connection 29.” Perlman further explains “in step 606, the WebTV server 5 automatically downloads these device drivers to the WebTV client 1 over the network connection 29. In step 607, the WebTV box 10 receives and automatically installs the

device drivers from the WebTV server 5.” With regards to the peripherals 30, Perlman states in column 1, lines 26-33, “typical peripheral devices that may be used in such a system include keyboards, pointing devices, monitors, printers, mass storage devices, and audio or visual input/output devices. Generally, for any particular peripheral device, the main computer must be programmed with special software that permits the main computer to communicate with the peripheral device--this software is often referred to as the device driver for the peripheral device.” Therefore, the first limitation of claim 21 is met, since the network device, the WebTV host 10, acquires “print related information necessary for generating print data” as stated in the application disclosure “from a prescribed location on the network at a prescribed time.”

Perlman shows in figure 5 the WebTV box 10 communicably attached via data bus 28 to peripherals 30. In the specific case of utilizing a printer as a peripheral 30, print data converted from text or images to a printer-recognizable format via the printer driver downloaded and installed in WebTV host 10 is transmitted to the printer via bus 28. Therefore, the patented invention meets the limitation “said print data is generated by using said acquired print related information, and sent to said printer.”

Perlman does not disclose a printer wherein the network device (either a host machine or a print server) is physically integrated within the printer enclosure.

Kageyama discloses in figure 2a a print server 14 with the server 15, controller 16, and printer engine 17 encapsulated within the same physical device. A more detailed depiction of the server 14’s internals is shown in figure 2b. The server includes

a terminal communication port 150 which allows it to receive print data from clients 11-13 via network 10.

Therefore it would have been obvious at the time of invention to one of normal skill in the art to combine in Perlman's automatic printer device driver installation system the network device with the printer in a common physical enclosure as taught by Kageyama.

The two are combinable because they both are both from the field of peripheral management and communication.

The motivation behind this combination would be to reduce the amount of user interaction in the installation of software by including the printer device driver within the printer, in effect removing the tedious step of installing printer device drivers on each host machine to utilize a given printer.

Therefore it would have been obvious to combine Perlman and Kageyama to produce the invention as claimed in claim 21. Note for all further rejections under 35 USC 103, the aforementioned Perlman as modified by Kageyama combination is used.

With regards to claim 22, Perlman discloses in column 5, lines 34-35, a method of automatically identifying and installing device drivers for peripherals "at system initialization (i.e., upon power-up or in response to a reset command.)" Thus the prescribed time as disclosed in the rejection for claim 2 is either when the said printer is turned on [or] upon receipt of instructions from a user." Broadly defined, the system power-up process includes all peripheral devices, and thus the method disclosed by

Perlman automatically begins upon initialization of the printer. Additionally, broadly defined, a reset command as disclosed by Perlman qualifies as an instruction from the user, thus the patented system begins its automatic identification and driver download process "upon receipt of instructions from a user."

Perlman does not disclose a printer wherein the network device (either a host machine or a print server) is physically integrated within the printer enclosure.

Kageyama discloses in figure 2a a print server 14 with the server 15, controller 16, and printer engine 17 encapsulated within the same physical device. A more detailed depiction of the server 14's internals is shown in figure 2b. The server includes a terminal communication port 150 which allows it to receive print data from clients 11-13 via network 10.

Therefore it would have been obvious at the time of invention to one of normal skill in the art to combine in Perlman's automatic printer device driver installation system the network device with the printer in a common physical enclosure as taught by Kageyama.

The two are combinable because they both are both from the field of peripheral management and communication.

The motivation behind this combination would be to reduce the amount of user interaction in the installation of software by including the printer device driver within the printer, in effect removing the tedious step of installing printer device drivers on each host machine to utilize a given printer.

Therefore it would have been obvious to combine Perlman and Kageyama to produce the invention as claimed in claim 22.

With regards to claim 23, the Kageyama modified Perlman system as thoroughly described above comprises "a method and apparatus for automatically installing appropriate device drivers for all peripheral devices connected to a host processing system over a network." Again stating column 6, lines 59-62 of Perlman's patent, the system "in step 606 the WebTV server 5 automatically downloads these device drivers to the WebTV client 1 over the network connection 29." Therefore the print related information comprises "at least a color version table, printer driver program, font data, or font renderer program"

10. Claims 11-19, and 24-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman (US-PAT 6269481) in view of Kageyama (US-PAT 5303336) further in view of Gase (US-PAT 5580177).

With regards to claims 11 and 24, Gase states in column 4, lines 38-44, "each modular I/O card 30 periodically 'advertises its availability by the transmission of messages to file server 16. Each message includes the name of the service, the type of the service, and the address of the available service. This data is accumulated within file server 16 and enables the generation of display presentation 60 at a client processor. Display screen presentation 50 appears on a client processor in response to

a user's request to show available printers." The host queries the server in reference to available printers according to the installed device driver on the printer, and the server collects this address and status information from the multiple printer transmissions stored in a database and relays the information back to the host." Broadly defined, this qualifies as "an inquiry of location information of print related information, the corresponding location information is extracted in reference to said database and sent." Because the Perlman-Kageyama combination includes the network device within the printer enclosure, the addition of the Gase method to the aforementioned combination meets both the limitations for claim 11, the network device, and claim 24, the printer.

Regarding claims 12 and 25, the Perlman-Kageyama combination as exhaustively described above anticipates a printer with an integrated network device/print server, which is capable of acquiring printer device drivers from a prescribed time and location and generating print data using the device driving and printing the document. For more detail regarding this combination please refer back to the detailed description in the previous rejections.

The aforementioned Perlman-Kageyama invention does not perform a judgement to determine whether the driver contained in the printer is different from the driver in the server, nor does it re-download the driver in the event that the judgement is positive.

Gase discloses a method of information processing wherein a file server, analogous to the WebTV server 5 as disclosed by Perlman, 16 contains "memory for

storing a most updated printer driver procedure for each printer type coupled to the file server.” Flowchart 3a diagrams the process flow in which Gase’s method acquires “print related information.” Upon user input to print a document, the print utility in networked clients 10-14 requests a print job in step 70. Upon selection of a printer in step 74, the file server compares printer driver in the client machine (analogous to the printer with included client machine) with the file server stored printer driver. Gase further describes this judgement in column 5, lines 13-22, stating, “because memory 34 stores (i) most updated versions of printer drivers in printer/driver library 38 (ii) printer administration utility 28 and (iii) printer utility 24, there always exists a repository where the most updated version of a program can be found. Thus, when a client processor elects to utilize a particular printer, it further determines whether its printer driver 26 is consistent with the most updated printer driver version in printer driver library 38. If not, the client processor causes its printer driver 26 to be revised or overwritten to reflect the most updated printer/driver version contained within printer driver library 38.”

Therefore it would have been obvious at the time of invention to one of normal skill in the art to include in the aforementioned Perlman-Kageyama combination a comparison and judgement operation as taught by Gase.

The three are combinable because they are all from the field of peripheral setup and communication; in particular, Perlman and Gase deal specifically with automatic device driver installation, while Kageyama and Gase deal specifically with print server automation.

The motivation behind this modification would be to automatically and seamlessly ensure that the most up to date printer device driver is installed on the printer's device driver memory.

Therefore it would have been obvious to combine the Perlman-Kageyama combination with the Gase method to obtain the invention disclosed in claims 12 and 25.

With regards to claims 14 and 27, the judgement as described by the preceding claim rejection of 12 and 25 denotes that "the client processor causes its printer driver 26 to be revised or overwritten to reflect the most updated printer/driver version contained within printer driver library 38." Since in the aforementioned Perlman-Kageyama combination the client processor/network device is integral to the printer, this judgement is "made by the printer [or network device] itself."

Regarding claims 16 and 29, the aforementioned Perlman-Kageyama printer is on the network connected to the device driver server. Therefore, the printer comprises "a prescribed location on the network." Broadly defined, the Perlman-Kageyama printer is characterized in that "said judgement is made at a prescribed location on said network."

In regards to claims 13 and 26, the method as disclosed by Gase involves the "client processor caus[ing] its printer driver 26 to be revised or overwritten to reflect the most updated printer/driver version contained within printer driver library 38."

"Overwriting" memory is an identical process to "replacing" memory. Therefore, if the client device driver does not match the server's device driver, it is required to be replaced by the client processor.

With regards to claims 15 and 28, the judgement as described by the preceding claim rejection of 12 and 25 denotes that "the client processor causes its printer driver 26 to be revised or overwritten to reflect the most updated printer/driver version contained within printer driver library 38." Since in the aforementioned Perlman-Kageyama combination the client processor/network device is integral to the printer, this judgement is "made by the printer [or network device] itself."

Regarding claims 17 and 30, the aforementioned Perlman-Kageyama printer is on the network connected to the device driver server. Therefore, the printer comprises "a prescribed location on the network." Broadly defined, the Perlman-Kageyama printer is characterized in that "said judgement is made at a prescribed location on said network."

With regards to claims 18 and 31, Gase's disclosed method keeps the installed device driver in the memory of the client processor for use until the client processor detects a difference between the client device driver and the updated server device driver. Since in the aforementioned Perlman-Kageyama combination the client processor/network device is integral to the printer, the "print related information acquired from a prescribed location on said network is retained in said printer [or network device], and said print related information is held to be available until it is deleted."

Regarding claims 19 and 32, Gase's disclosed method keeps the installed device driver in the memory of the client processor for use until the client processor detects a difference between the client device driver and the updated server device driver. The overwriting process is functionally identical to a delete process, since the "precedeing print related information" is no longer stored in the said memory location after the overwriting. Since in the aforementioned Perlman-Kageyama combination the client processor/network device is integral to the printer, the "said printer [or network device] comprises preceding print related information corresponding to said print related information which is acquired, said preceding print related information is deleted."

Allowable Subject Matter

11. Claims 6-10, 20, and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yacoub (US-PAT 6452692) discloses a networked print server for automatically selecting print locations, wherein the print server keeps all the driver files updated and the host machines only have a virtual printer installed, as is the standard in the industry. Agatone (US-PAT 5852744) discloses a method for

automatically discovering a network printer wherein a central network server is responsible for device driver storage and updating.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert N. Kang whose telephone number is (571) 272-0593. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (571)272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Robert N.S. Kang



TWYLER LAMB
PRIMARY EXAMINER